

CLAIMS

What is claimed is:

1. A tire tread for a vehicle tire, the tread having at least one tread element projecting from the base of the tread, the tread element having at least one radially extending side,
wherein the side of the at least one tread element has a cavern formed therein, the cavern having a base located below the uppermost surface of the tread element when the tire is unworn.
2. The tread of claim 1 wherein the cavern has a base parallel to the uppermost surface of the element.
3. The tread of claim 1 wherein the cavern roof has a sloping configuration.
4. The tread of claim 1 wherein the tread element is a circumferentially extending rib bounded by at least one circumferentially extending groove forming the side of the rib, and the cavern in the side of the tread element opens to the circumferentially extending groove.
5. The tread of claim 4 wherein the rib has a series of caverns formed in the side of the rib, the caverns in the series being located at different radial heights along the rib side.
6. The tread of claim 1 wherein the tread element is a block formed by a plurality of grooves, the tread comprising multiple adjacent blocks wherein each block has a cavern therein and the caverns in adjacent blocks are located at different radial heights.
7. A tire tread for a vehicle tire, the tread having a plurality of tread elements, the tread elements having radially extending sidewalls,

the tread being characterized by at least one series of adjacent caverns formed in the tread element sidewalls, each of the adjacent caverns in the series located at different radial heights.

8. The tread of claim 7 wherein the tread elements are circumferentially extending ribs and the adjacent caverns are formed in a sidewall of one of the ribs.
9. The tread of claim 7 wherein the tread elements are multiple tread blocks and each cavern in the at least one series is formed in a single tread block, the adjacent caverns of the at least one series being formed in adjacent tread blocks.
10. The tread of claim 7 wherein each cavern has a base parallel to the surface of the tread element, the base being provided with information to indicate the state of wear of the tread.
11. The tread of claim 7 wherein each cavern in the at least one series radially overlaps the cavern adjacent to it.
12. The tread of claim 1 wherein the cavern is located on the leading edge of the tread element.
13. The tread of claim 1 wherein the cavern is located on the trailing edge of the tread element.
14. The tread of claim 7 wherein the tread elements are sloped lugs and the at least one series of caverns is located on the leading edge of the lugs.